**Validation Testing Report for Titus Palace Pizza Order Manager**

Introduction

This document presents the validation testing conducted on the Titus Palace Pizza Order Manager application. The aim was to ensure that the application meets all functional requirements, provides a user-friendly experience, and handles both expected and unexpected user inputs gracefully.

Objective

The objective of this validation testing was to:

* Verify that all application functionalities work as expected.
* Identify and correct any deviations from the expected outcomes.
* Ensure robust input validation to prevent application errors.

Test Environment and Tools

* Operating System: Windows 11
* Python Version: 3.8
* Libraries: Tkinter, PIL for image handling, and web browser for email functionality.
* Tools: IDLE for Python script execution.

Test Data and Methodology

1. Valid Pizza Order Test

* Input: Chicken, Medium, Olives + Mushrooms, Quantity 2
* Expected Outcome: The order was added with the correct total price.

Invalid Pizza Type Test

* Input: No pizza selected, Large, Quantity 1
* Expected Outcome: Error message prompting pizza selection.

Invalid Quantity Test

* Input: Beef, Small, Quantity 0
* Expected Outcome: Error message indicating invalid quantity.

Maximum Quantity Test

* Input: Pepperoni, Large, Quantity 10
* Expected Outcome: The order was added successfully, testing the upper quantity limit.

Email Support Button Test

* Input: Click "Contact Support"
* Expected Outcome: Default email client opens with support email pre-filled.

Test Results and Analysis

Valid Pizza Order Test

* Result: Passed. Correct functionality.

Invalid Pizza Type Test

* Result: Failed initially; the application did not prevent proceeding without a pizza selection.
* Fix: I added input validation to ensure a pizza type is selected before adding it to the order.

Invalid Quantity Test

* Result: Failed initially; the application allowed a quantity of 0.
* Fix: Adjusted validation to enforce a minimum quantity of 1.

Maximum Quantity Test

* Result: Passed. The application correctly handled the maximum quantity.

Email Support Button Test

* Result: Passed. The email client opened as expected.

Conclusion and Recommendations

The validation testing identified two critical areas needing fixes: the selection validation for pizza types and quantity input validation. After implementing the necessary corrections, the application meets all functional requirements and handles inputs as expected. Future recommendations include implementing additional features like coupon codes for discounts and expanding the toppings selection.

The screenshots of your good test data are working.

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